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ABSTRACT

Many classical pianists want to develop jazz piano skills because they have acquired: (1) an awareness of the importance of jazz as an art form; (2) an attraction to the sophistication and complexity of jazz music; (3) an interest in exploring contemporary music styles; and (4) a desire to become involved with a type of music which is viewed as enjoyable. This study addresses the need for a short course in basic jazz piano skills oriented toward the special interests, skills, and attitudes of adult pianists and attempts to determine if a mastery learning theory approach can be applied as the basis of instruction. A course designed on this principle has specific objectives and is organized into small, sequential units in which student mastery is carefully monitored. Based on a review of mastery learning theory, a five session, 15 hour course was designed, developed, and taught to two groups of four adult students. An evaluation of student achievement was conducted during 1985 and 1986. Results indicated that: (1) all students reached the mastery level of achievement on the posttest; (2) 75% of the students reached the predetermined mastery level of performance concerning seventh chords; (3) 88% of the students achieved mastery level in improvisation; and (4) all students acquired more positive attitudes toward their own improvisational ability. Tables and figures are included. (JHP)

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TEACHING BASIC JAZZ PIANO SKILLS: A MASTERY LEARNING APPROACH

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TEACHING BASIC JAZZ PIANO SKILLS:
A MASTERY LEARNING APPROACH

Although hundreds of jazz methods and materials have been published in the last decade, very little attention has been given to the special needs of the classically-trained adult pianist interested in learning the rudiments of jazz piano improvisation. Many classical pianists would like to acquire jazz piano skills, for a variety of reasons which may include (a) an awareness of the growing importance and status of jazz as a serious art form, (b) an attraction to the sophistication and complexity of jazz music, (c) an interest in updating musical knowledge in order to help piano students explore contemporary musical styles, and (d) a desire to become involved with a type of music which is viewed as enjoyable or fun.

Unfortunately, traditional methods of teaching piano have stressed note reading and the interpretation of classical musical literature. Because improvisation plays little or no part in the training of the average piano student (Lindstrom, 1974), many pianists believe that improvisation is an innate behavior which is mysteriously acquired at birth. Notation-dependent adult pianists often perceive themselves as lacking in improvisational talent. In addition, pianists are often not familiar with

contemporary jazz styles. This study addressed the need for a short course in basic jazz piano skills which was oriented toward the special interests, skills, and attitudes of adult pianists.

One of the weaknesses of many current jazz curricula is that there appears to be no provision for accountability. Course objectives are often not established, or are not stated clearly. There is seldom any guarantee that each or any student who undertakes the study of jazz within a course framework will be able to reach a specific level of performance. A course was needed in the area of jazz which was systematically designed in such a way that virtually every student who takes the course can expect to acquire certain knowledges, skills, and attitudes.

Teaching procedures based upon mastery learning have been utilized primarily in public elementary schools in subject areas which are not concerned with the development of creativity. However, Bloom (1978) has proposed that ideas and practices based upon mastery learning theory might be used to teach the humanistic arts such as music, art, and dance. Block (1980) has suggested that mastery learning can be adapted to humanistic education, and to subjects which are intermediate or advanced, and involve divergent thinking. There is evidence to indicate that mastery learning can be effectively utilized in the area of jazz piano.

Problem of the Study

The problem of this study was whether mastery learning procedures suggested by Block (1980), based upon the theoretical models of mastery learning suggested by Carroll (1963) and Bloom (1968), could be applied to an unusual area of instruction: specifically, a course in basic jazz piano skills for classically-trained adult jazz pianists. Mastery learning theory contends that any student can learn any subject, if the student is provided with appropriate prior and current conditions of learning. A course designed on this principle must have specific objectives which are attainable by every student who takes the course. The subject matter is organized into small sequential units, and student mastery of each unit is carefully monitored.

The course was designed for group instruction of adult students. The process of course development was conducted over a two-year time span. Workshops in basic jazz piano were conducted, and each workshop was evaluated and revised in order to produced the final methodology.

The goals of the course, in its final form, were (a) to provide students with knowledge of the jazz idiom, (b) to develop students' skills in realizing seventh chords from letter symbols, (c) to develop students' skills in jazz improvisation, and (d) to affect students' attitudes toward their own improvisational ability.

Research Questions

The course in its final form was intended to be taught to a group of adult students within a time frame of five three-hour sessions in five weeks. The following questions were addressed in the field test of the course:

1. Will the course enable students to achieve a mastery score on an exam which covers items related to knowledge of the jazz idiom?
2. Will the course enable students to achieve a mastery score on an exam which tests skills in realizing seventh chords from letter symbols?
3. Will the course enable students to achieve a mastery score on an exam which tests skills in jazz improvisation?
4. Will the course enable students to respond to a questionnaire in a manner which indicates that they have acquired more positive attitudes toward their own improvisational ability?

Methodology

The process of course development was based on a model suggested by Markle (1967). This model consisted of three stages: developmental testing, validation testing, and field testing. The evaluation of the course was based upon the formative-summative evaluation theory of Scriven (1966), which states that evaluation can be used for course

development and improvement, or to determine the value or effectiveness or value of a course. Both formative and summative evaluation instruments were devised by the investigator and used in the process of course development. A model of the process used in this study is shown in figure 1.

Preparation. Prior to course development, the investigator identified several phases of preparation which included (a) the education and experience of the course developer,(b) a needs assessment, (c) a review of related literature, and (d) the selection of course goals and content. The course developer was trained as a classical pianist and piano teacher. After several years of teaching, the developer studied and performed jazz piano for ten years. An extensive literature review of jazz methods and jazz curriculum studies was undertaken, and course content and goals were selected based upon this review as well as the developer's experience, education, and expertise and a performer and teacher of jazz piano.

Course Development. The systematic development of the course was divided into a three stages. Stage 1 was the developmental testing of the course. During this stage, the investigator taught basic jazz piano skills to adult pianists in individual and group situations. Close observation of students and careful attention to student feedback enabled the investigator to develop a workable methodology.

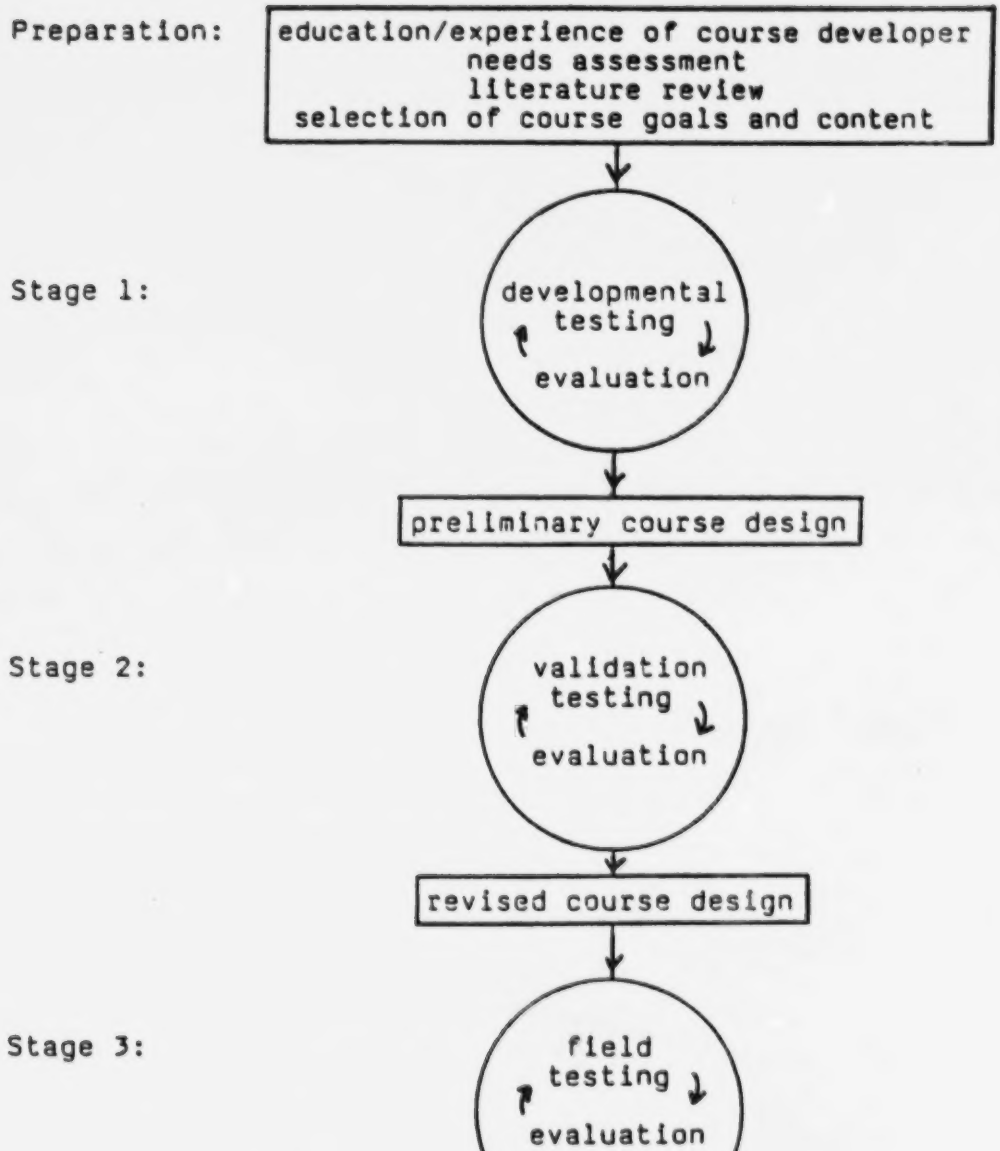

FIGURE 1
A MODEL FOR THE DEVELOPMENT OF A COURSE
IN BASIC JAZZ PIANO SKILLS

Stage 2, the validation testing of the course, was accomplished in two phases, in order to refine the teaching procedures and course design. A course design based upon mastery learning procedures suggested by Block (1980) was created prior to Stage 2, and consisted of detailed lesson plans and evaluation materials. During Stage 2, trained process evaluators assisted the investigator in the collection of evaluation data, provided daily feedback to the investigator, and wrote evaluation summaries for the purpose of course improvement. The first phase was a one-week workshop in basic jazz piano, and the second phase was a five-week workshop.

Stage 3 was the field testing of the final methodology, which consisted of a five-week, 15-hour workshop in basic jazz piano skills taught to a group classically-trained adult pianists, based upon mastery learning procedures. Formative and summative evaluation instruments were devised by the investigator. Evaluation data were collected by the investigator and two trained process evaluators.

Course Design. The course was designed based upon mastery learning procedures suggested by Block (1980). Block suggested two distinct sets of steps which are necessary for the planning and implementation of a course which utilizes a mastery learning strategy. The first set of steps, which are curricularly oriented and occur prior to implementation, include the following: (a) formulate objectives,

(b) prepare a final exam, (c) determine the final exam score which would indicate mastery performance, (d) break the course down into a sequence of smaller learning units, (e) sequence the units so that the material in each unit transfers either to the next unit (linear) or to a subsequent unit (hierarchical), (f) develop feedback/ corrective procedures, and (g) develop alternate instructional procedures and materials.

The second set of steps are instructionally oriented and include the following: (a) orient the students to mastery learning, (b) teach a learning unit, (c) determine if each student has achieved the unit mastery standard, and (d) employ corrective measures such as reteaching, tutoring, or alternative approaches with students who have not achieved the unit mastery. The students who initially reach the standard may serve as peer tutors, or may engage in enrichment activities. These steps were employed in the validation testing and field testing of the course.

Sample Population

Subjects were adult pianists, aged 19-72, who were interested in acquiring basic jazz piano skills within the context of a college course. Subjects were required to demonstrate their knowledge of scales and triads, and had to pass a sight reading and facility/ coordination test before being allowed to into a class. All pianists who met the

entry requirements were used as subjects. Students who participated in the class were college students, piano teachers, or active amateur or professional musicians who resided in the vicinity of Rapid City and Spearfish, South Dakota.

Collection of Data

Data for this study were collected in 1985 and 1986 in Spearfish and Rapid City, South Dakota. Formative and summative evaluation data were collected during Stage 1 by the investigator, and Stage 2 and Stage 3 by the investigator and trained process evaluators. Because of the small size of each class, and the sensitive nature of the subject matter, it was believed that an outside observer might inhibit the performance of the subjects. One internal process evaluator was selected from each class, prior to the first class session, and trained by the investigator. The evaluators were provided with course objectives; unit lesson plans, which included formative evaluation checklists and comment sheets after each unit; and a process evaluator summary sheet. Process evaluators were paid, and/or were allowed to take the course at no cost.

Results

Summative data collected during the field test of the course (Stage 3) were analyzed. These data were used to answer four research questions.

The first research question was, will the course enable students to achieve a mastery score on an exam which covers items related to knowledge of the jazz idiom? Knowledge of the jazz idiom consisted of the ability to define several jazz terms (blues, tritone substitute, turnarounds, etc.), the ability to name five jazz pianists and five jazz pedagogists, and the ability to interpret several chord symbols commonly used in jazz (M7, m7-5, sus, etc.). Data were collected by the administration of a written knowledge pretest and a posttest. The results indicated that all students reached the mastery level of achievement on the jazz knowledge posttest (see Table 1).

TABLE 1
WRITTEN KNOWLEDGE PRETEST AND POSTTEST SCORES WITH POSSIBLE SCORE 70, MASTERY SCORE 50

Student	1	2	3	4	5	6	7	8
Pretest	13	0	*53	18	18	9.5	36	6.5
Posttest	*59	*63	*68	*68.5	*63.5	*67	*68	*62.5

* indicates mastery

The second research question was, will the course enable students to achieve a mastery score on an exam which tests skills in realizing seventh chords from letter symbols? Specific tasks related to jazz piano performance were taped privately by students and submitted prior to the last class session. Students performed "Lover Man", reading from a lead sheet, using closed position root position and

second inversion seventh chords, swing bass, and open position chords in different sections of the tune. Students also performed a jazz or popular tune of their choice using a walking bass line in the left hand and closed position seventh chords in the right. The tapes were scored by three trained judges; interjudge reliability was .90. Seventy-five percent of the students reached the predetermined mastery level of performance (see Table 2).

TABLE 2
FINAL PERFORMANCE EXAM SCORES: SEVENTH CHORDS WITH POSSIBLE SCORE 16, MASTERY SCORE 11

Student	1	2	3	4	5	6	7	8
Score	*11.7	*16	*12.3	*13	7.7	*14.3	*13.7	5.3

* indicates mastery

The third research question was, to what extent will the course enable students to achieve a mastery score on an exam which tests skills in jazz improvisation? Specific tasks related to jazz piano performance were taped privately by students and submitted the last class session. Students improvised on a 12-bar blues in two different keys, a portion of "Lover Man", and a jazz or popular tune of their choice. The tapes were scored by three trained judges; interjudge reliability was .87. Eighty-eight percent of

the students reached the predetermined mastery level of performance (see Table 3).

TABLE 3
FINAL PERFORMANCE EXAM SCORES: SEVENTH CHORDS WITH POSSIBLE SCORE 16, MASTERY SCORE 11

Student	1	2	3	4	5	6	7	8
Score	*12.3	*16	*12.3	*13.3	*12	*13.3	*14.7	5.3

* indicates mastery

The fourth research question was, will the course enable students to respond to a questionnaire in a manner which indicates that they have acquired more positive attitudes toward their own improvisational ability? Students responded to six questions related to pianists' attitudes toward personal improvisational ability. Each question was followed by a seven-point scale placed between two bipolar adjectives. The questions were administered at the beginning and end of the course. Student responses to the questions before and after the course were compared, using a Wilcoxon matched-pairs, signed-ranks test. Students' responses to the attitude questions appeared to be significantly ($p<.01$) more positive at the end of the course (see Table 4-9).

TABLE 4
ATTITUDE QUESTION #1 ON A QUESTIONNAIRE
CONCERNED WITH ATTITUDES TOWARD IMPROVISATIONAL ABILITY

1. You are alone at a piano. The likelihood of you improvising something on the piano is:
very great 7 6 5 4 3 2 1 very small

Pair	Before	After	Difference	Rank of Difference	Rank with Less Frequent Sign
1	5	6	+1	2.5	
2	3	6	+3	6	
3	5	6	+1	2.5	
4	1	7	+6	8	
5	1	2	+1	2.5	
6	1	6	+5	7	
7	5	6	+1	2.5	
8	4	6	+2	5	
					T=0*

*significance <.01

TABLE 5
ATTITUDE QUESTION #2 ON A QUESTIONNAIRE
CONCERNED WITH ATTITUDES TOWARD IMPROVISATIONAL ABILITY

2. You are in a group situation, improvising on the piano. You feel:
very comfortable 7 6 5 4 3 2 1 very uncomfortable

Pair	Before	After	Difference	Rank of Difference	Rank with Less Frequent Sign
1	2	5	+3	3	
2	1	3	+2	1	
3	3	3	0		
4	1	4	+3	3	
5	1	6	+5	6	
6	1	4	+3	3	
7	4	4	0		
8	2	6	+4	5	
					T=0*

* significance <.01

TABLE 6
ATTITUDE QUESTION #3 ON A QUESTIONNAIRE
CONCERNED WITH ATTITUDES TOWARD IMPROVISATIONAL ABILITY

3. A close friend or student asks you to improvise something on the piano. As you are improvising, you feel:
very insecure 1 2 3 4 5 6 7 very comfortable

Pair	Before	After	Difference	Rank of Difference	Rank with Less Frequent Sign
1	3	3	0		
2	2	4	+2	1	
3	4	4	0		
4	1	4	+3	2.5	
5	1	5	+4	4	
6	1	4	+3	2.5	
7	3	3	0		
8	4	4	0	5	
					T=0*

* significance <.01

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TABLE 7
ATTITUDE QUESTION #4 ON A QUESTIONNAIRE CONCERNED WITH ATTITUDES TOWARD IMPROVISATIONAL ABILITY

4. Another musician asks you how confident you feel about your ability to improvise. Your honest answer would be that you feel:
very confident 7 6 5 4 3 2 1 very insecure

Pair	Before	After	Difference	Rank of Difference	Rank with Less Frequent Sign
1	2	4	+2	2.5	
2	1	2	+1	1	
3	2	2	0		
4	1	4	+3	4	
5	1	1	0		
6	1	4	+3	4	
7	2	4	+2	2.5	
8	2	5	+3	4	
					T=0*

* significance <.01

TABLE 8
ATTITUDE QUESTION #5 ON A QUESTIONNAIRE CONCERNED WITH ATTITUDES TOWARD IMPROVISATIONAL ABILITY

5. Rate your improvisational talent or potential on the following scale:
poor 1 2 3 4 5 6 7 excellent

Pair	Before	After	Difference	Rank of Difference	Rank with Less Frequent Sign
1	4	5	+1	2	
2	1	6	+5	7	
3	6	7	+1	2	
4	1	5	+4	6	
5	1	1	0		
6	1	4	+3	4.5	
7	2	5	+3	4.5	
8	5	4	-1	2	
					T=2*

* significance <.01

TABLE 9
ATTITUDE QUESTION #6 ON A QUESTIONNAIRE CONCERNED WITH ATTITUDES TOWARD IMPROVISATIONAL ABILITY

6. Rate your present improvisational ability or skill on the following scale:
poor 1 2 3 4 5 6 7 excellent

Pair	Before	After	Difference	Rank of Difference	Rank with Less Frequent Sign
1	3	5	+2	4	
2	1	1	+2		
3	1.5	3	+4.5	2	
4	1	2	+1	1	
5	1	1	0		
6	1	3	+2	4	
7	1	4	+3	6	
8	2	4	-2	4	
					T=0*

* significance <.01

Conclusions

As a result of this study, and within the limits of this study, it can be concluded that mastery learning procedures can be effectively utilized in the design and implementation of a short course in basic jazz piano skills for adult classical pianists. Mastery learning procedures (Block, 1980) based upon the theories of Carroll (1963) and Bloom (1968) were highly effective for the design and implementation of the course, as evaluated by the summative evaluation techniques Stage 3 of the study.

Summative evaluation data collected during the field test (Stage 3), a five-week, 15-hour course taught to two groups of four students, indicated that (a) 100% of the students achieved a mastery score on a test which covered items related to knowledge of the jazz, (b) 75% of the students achieved a mastery score on an exam which tested skills in realizing seventh chords from letter symbols, and (c) 88% of the students achieved a mastery score on an exam which tested skills in jazz improvisation, and (d) 100% of the students responded to a questionnaire in a manner which indicated that they had acquired more positive attitudes toward their own improvisation ability.

Although cognitive knowledge of the jazz idiom can be acquired in a short amount of time (a five-session, 15-hour course), a basic level of jazz performance skills related to chord realization and improvisation may not be reached by every student within a short time frame. It is possible

that a higher level of keyboard entry skills than those required by this course would result in higher levels of performance achievement.

This study indicates that it is possible to affect adult pianists' attitudes toward their own improvisational skills in a short amount of time. Success at improvisation in a jazz context appears to have a positive effect on adult pianist's attitudes toward their improvisational abilities. A carefully structured, developmental sequence of activities related to jazz improvisation skills, provided in a class situation, may relieve some of the inhibitions many adult pianists have toward improvisation.

Discussion and Recommendations

The use of mastery learning procedures enabled the students who participated in the field test of the five-week, 15-hour course in basic jazz piano to absorb a great deal of material in a short time. The time frame appeared to be sufficient to allow most students to reach the predetermined mastery levels of knowledge and performance. Specific course objectives were established and mastery criterion levels were set, which provided the course with direction and focus. The course content was broken down into small, manageable chunks of information. Concepts were followed by immediate and active application. Students were challenged by each unit, but were able to successfully accomplish each task. The teacher provided

constant feedback and individual assistance for students who had learning difficulties, while faster students engaged in peer tutoring or enrichment activities.

Although mastery learning procedures were very useful in the design and implementation of the course, it is important to be conscious of the fact that the development of a new course is a slow process which requires trial and error, informed decision making, and constant evaluation and revision of materials and strategies. The three-stage model suggested by Markle (1967) for course development is time consuming and costly, but it can result in more effective, efficient teaching materials and strategies. The model is particularly useful for the development of a course in an area which has been only marginally explored, such as the teaching of basic jazz piano skills.

Formative and summative evaluation procedures were very useful for the development and evaluation of the course. Process evaluators and students provided helpful formative information, which was used for course improvement throughout the developmental process. Summative instruments provided information about the effectiveness of the course in each stage of development as well as in the final field test.

This study has provided some strategies which seem to affect the attitudes of adult pianists toward their improvisational talent and ability. This investigator believes that a highly structured, goal-oriented mastery

learning approach was very effective. Students were given a tetrachord pattern, and answered short, one-measure motives initiated by the teacher, within a 12-bar blues framework. Frameworks for improvisation were gradually expanded, and by the end of the course, students could improvise 12 or more measures in front of other musicians without inhibitions. Students also improvised using a variety of familiar jazz and popular tunes, which used fairly simple harmonic progressions. The articulation of specific techniques for improvisation helped students to become less dependent upon notation. The specification of exit behaviors provided motivation as well as closure.

The teaching of jazz piano in a group was highly effective. Enrichment activities were provided for students who moved more quickly, but peer teaching and assistance were strongly encouraged. A positive community spirit characterized each class. Students were never compared, or encouraged to compete. Each student was encouraged to draw from his/her own musical experience, and the uniqueness of each student's improvisations was stressed. In addition, group improvisation activities were provided in which students were encouraged to listen carefully, and to explore and expand upon the musical ideas of their classmates.

It is difficult to establish entry criteria for a course of this nature. The students in this study who did not reach the mastery levels of performance were clearly on the lower performance level of the class, in terms of

coordination and general keyboard facility. Perhaps if students at a lower performance level had unlimited practice time available, all students who take this course would be able to reach a mastery level of performance within the established time frame.

This study has demonstrated a novel use of mastery learning procedures. It has provided new information about the applicability of mastery learning theory to the field of adult learning in general, and jazz in particular. It is hoped that this study will serve as a useful model for educators who are seeking effective ways to develop, design, and evaluate a their own curriculum materials. It is recommended that music educators and college teachers of all disciplines experiment with using mastery learning procedures in the design and process of instruction.

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